

CLAIMS

What is claimed is:

1. A system for rendering fonts into a memory comprising:
a data structure located within a memory or other memories; the data structure including at least one font array; and
a graphics controller for accessing said at least one font array and for rendering characters of said at least one font array into the appropriate locations of a memory or other memories.

2. The system of claim 1 wherein any of the memories comprises a frame buffer.

3. The system of claim 1 wherein any of the memories comprises a system memory.

4. The system of claim 1 in which said at least one font array includes a plurality of characters.

5. The system of claim 4 in which each of the characters comprises one bit per pixel.

6. The system of claim 4 in which each of the characters comprises a plurality of bits per pixels.

7. The system of claim 1 in which said at least one font array comprises a plurality of

font arrays.

8. The system of claim 7 in which each of the plurality of font arrays includes a plurality of characters.

9. The system of claim 8 wherein characters within different font arrays can be different sizes:

10. The system of claim 9 in which each of the characters comprises a bit per pixel.

11. The system of claim 9 in which each of the characters comprises a plurality of bits per pixel.

12. The system of claim 9 in which each of the characters includes size height information.

13. The system of claim 9 in which each of the characters includes size width information.

14. The system of claim 1 in which the graphics controller comprises:
a set of registers for utilizing the information within the plurality of font arrays
such that font characters can be efficiently retrieved from memory and can then be rendered in the
memory.

1 15. The system of claim 14 in which the set of registers includes a font pointer
2 register.

1 16. The system of claim 14 in which the set of registers includes a font pitch register.

1 17. The system of claim 14 in which the set of registers includes an index register.

1 18. The system of claim 14 which includes a horizontal information register.

19. The system of claim 14 which includes a vertical information register.

20. The system of claim 14 which includes a linear information register.

21. The system of claim 14 in which the set of registers further includes a glyph
information register which holds character information retrieved by the graphics controller based
upon the font pointer register.

1 22. The system of claim 14 in which the set of registers further includes a glyph
2 information register which holds character information retrieved by the graphics controller based
3 upon the font pitch register.

1 23. The system of claim 14 in which the set of registers further includes a glyph
2 information register which holds the character information retrieved by the graphics controller

3 based upon the index register.

1 24. The system of claim 14 in which the set of registers includes a size width register.

1 25. The system of claim 14 in which the set of registers includes a size height register.

1 26. A method for rendering fonts into a memory, comprising the steps of:

2 (a) providing a data structure located in a memory or other memories; the data
3 structure including at least one font array;

4 (b) accessing said at least one font array; and

5 (c) rendering characters of said at least one font array into the appropriate
6 locations of a memory or other memories.

7 27. The method of claim 26 wherein any of the memories comprises a frame buffer.

8 28. The method of claim 26 wherein any of the memories comprises a system
9 memory.

1 29. The method of claim 26 in which said at least one font array includes a plurality of
2 characters.

1 30. The method of claim 29 in which each of the characters comprises one bit per
2 pixel.

1 31. The method of claim 29 in which each of the characters comprises a plurality of
2 bits per pixel.

1 32. The method of claim 26 in which said at least one font array comprises a plurality
2 of font arrays.

1 33. The method of claim 32 in which each of the plurality of font arrays includes a
2 plurality of characters.

1 34. The method of claim 33 wherein characters within different font arrays can be
2 different sizes.

1 35. The method of claim 34 in which each of the characters comprises one bit per
2 pixel.

1 36. The method of claim 34 in which each of the characters comprises a plurality of
2 bits per pixel.

1 37. The method of claim 26 in which includes:
2 a set of registers for utilizing the information within the plurality of font arrays
3 such that font characters can be efficiently retrieved from memory and can then be rendered in the
4 memory.

1 38. The method of claim 37 in which the set of registers includes a font pointer
2 register.

1 39. The method of claim 37 in which the set of registers includes a font pitch register.

1 40. The method of claim 37 in which the set of registers includes an index register.

1 41. The method of claim 37 which includes a horizontal information register.

42. The method of claim 37 which includes a vertical information register.

43. The method of claim 37 which includes a linear information register.

44. The method of claim 37 in which the set of registers further includes a glyph
information register which holds information retrieved by a graphics controller based upon the font
pitch register.

1 45. The method of claim 37 in which the set of registers further includes a glyph
2 information register which holds character information retrieved by a graphics controller based
3 upon the index register.

1 46. The method of claim 37 in which the set of registers includes a size width register.

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47. The method of claim 37 in which the set of registers includes a size height register.

ADD
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REGISTER